REMARKS/ARGUMENTS

Claims 1-33 are pending in the present application. Claim 23 is amended to address the rejection under 35 U.S.C. § 101. Support for the amendment can be found on page 21, first full paragraph. No new matter is added. Reconsideration and allowance of the claims is respectfully requested.

I. 35 U.S.C. § 101: Asserted Non-Statutory Subject Matter

The Examiner rejected claims 12-33 under 35 U.S.C. § 101 as directed to non-statutory subject matter. This rejection is respectfully traversed. The Examiner states that:

> Claims 12 - 33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or tangible result. No physical transformation is recited and additionally, the final result of the claim is for distributing software which is not a tangible result because the result not clearly claimed to be tangibly embodied on a computer readable medium. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. § 101.
>
> The Examiner has clarified the paragraph above in order to make the current policy more understandable. Examiner deems .the invention to be useful and concrete. The result is not claimed as tangible. This is very clear in claim 23 where the claimed invention has means for installing but us not actually claimed to be installing.

Office action of April 20, 2007, pp. 2-3.

With respect to claims 23-33, Applicants have amended claim 23 to recite that the computer program product is stored in a recordable-type medium. Thus, claim 23 is drawn to a physical device, specifically, the recordable-type medium. As shown below, because claim 23 is directed to a physical device, no tangible result is required to satisfy the requirements of 35 U.S.C. § 101.

A claim drawn to otherwise statutory subject matter does not become non-statutory simply because it uses a mathematical formula, computer program, or digital computer. *Diamond v. Diehr*, 450 U.S. 175, 209 U.S.P.Q. 1 (1981). It is impermissible to focus on a mathematical algorithm which may be part of a claim while donning blinders to block out all other parts of the claim and then declare that the claim as a whole is directed to a mathematical algorithm. *Ex parte Luthi*, 38 U.S.P.Q.2d 1863, 1864 (Bd. Pat. App. and Inter. 1992), citing *Ex Parte Logan*, 20 U.S.P.Q.2d 1465, 1468 (Bd. Pat. App. and Inter. 1991).

Claim 12 is as follows:

> 12. (Original) A data processing system for automatically distributing and installing software file packages throughout a multi-tiered computer architecture hierarchy, said hierarchy including a global tier, a hub tier that is below said global tier, and a target tier that is below said hub tier, said system comprising:
>
> a global computer system that is located in said global tier receiving a distribution request to distribute a file package to a target computer system that is located in said target tier;
>
> said global computer system starting a distribution process in said hub computer system;
>
> said global computer system distributing said file package and an installation process to said hub computer system that is located in said hub tier;
>
> said hub computer system utilizing said distribution process to automatically distributing said file package and said installation process to said target computer system; and
>
> said target computer system automatically installing said file package utilizing said installation process.

The Examiner asserts that claim 12 does not produce a tangible result and, for this reason, does not comport with the requirements of 35 U.S.C. § 101. However, this rejection is in error because claim 1 is directed to a physical device for which no tangible result is required. For example, the rejection of claim 12 under 35 U.S.C. § 101 is akin to rejecting a claim to a bicycle under 35 U.S.C. § 101. Such a rejection makes no sense because the bicycle, itself, is patentable subject matter under 35 U.S.C. § 101. The courts in *Diamond v. Diehr* and *Ex parte Luthi* recognized this principle.

Likewise, claim 12 is directed to a tangible device under 35 U.S.C. § 101. More specifically, claim 12 includes the features of "a data processing system," a "global computer system," a "hub computer system," and a "target computer system." These features are all computer systems, which require hardware to implement. Accordingly, the claimed devices are physical, tangible things. Given that a claim drawn to otherwise statutory subject matter does not become non-statutory simply because the claimed devices use a computer program or process, claim 12 is statutory under 35 U.S.C. § 101, as provided in *Diamond v. Diehr*. Accordingly, this rejection is overcome with respect to claim 12. Similarly, because claim 13 is directed to a physical device, the recordable-type medium, the rejection of claim 13 is overcome. The rejection of claims 14-33 under 35 U.S.C. § 101 are overcome by virtue of their dependence on claim 13.

II. 35 U.S.C. § 102, Asserted Anticipation

II.A. Reply to Examiner's Response

In response to the previous Response to Office Action, the Examiner asserts the following:

> 10. On page 18 the Applicant states the commercial product HP OpenView as taught *Muller* "...does not teach distributing and installing file packages throughout a multi-tiered computer architecture hierarchy and side hierarchy including a global tier, hub tier that are below said global tier, and a target tier that is below said hub tier." Absent from the Applicant's arguments is a concise difference of their terms and the topologies supported by the HP commercial product. Particularly absent is any acknowledgement of Chapter 12 Enterprise Hub Management. It appears the Applicant is taking the reference in part and not as a whole and imposing limitations of the software distribution section on the many network topologies supported. This point is fundamental indistinguishing the claimed invention over the HP reference. Applicant seems to be more interested in focusing on features of HP such as Network Management and have not addressed the actual capabilities of the commercial product. Applicant is held to the level of ordinary skill in the art and to be aware of all pertinent prior art (Customer Accessories, Inc. v. Jeffrey-Allan Ind. Inc., 1 USPQ2d 1196 (Fed Cir 1986).

Office action of April 20, 2007, pp.11-12.

Applicants have not ignored the teachings of chapter 12 of *Muller*. Chapter 12 of *Muller*, viewed in the context of *Muller* as a whole, does not teach the features of claim 1. In the subsequent response below, Applicants show that *Muller* does not teach three tiers of computing systems, as claimed, and in particular does not teach a global computing system as claimed. As shown below, the Examiner's assertions to the contrary are incorrect.

Applicants reproduce below the arguments presented in the previous response to office action. However, Applicants have also added a more detailed response to the rejection in view of chapter 12 of *Muller*. Applicants request that the Examiner consider the facts presented below and allow the claims.

II.B. Response to Rejection

The Examiner rejects claims 1, 12, and 23 under 35 U.S.C. §102 as anticipated by the commercial product HP OpenView as documented in the *Nathan Muller*, Focus on OpenView: A Guide to Hewlett-Packard's Network and Systems Management Platform, CBM Books, 1995 (hereinafter "*Muller*"). This rejection is respectfully traversed.

Regarding claim 1, the Examiner asserts the following:

> OpenView anticipates automatically distributing and installing software file packages (HP, pages 184, Synchronization and Change Orchestration) throughout a multi-tiered computer architecture hierarchy(HP, Supports many topologies pages 210-216,229-230,246-250), said hierarchy including a global tier (HP OpenView is a global tier - ability to manage one or more Hubs - see Chapter 12 - page 245), a hub tier (HP, chapter 12 - Hubs) that is below said global tier, and a target tier that is below said hub tier (As per above and HP, pages 2 - 18), said method comprising the steps of:

> receiving, within a global computer system that is located in said global tier, a distribution request to distribute a file package to a target computer system that is located in said target tier (HP, pages 179 - 182 and Chapter 12 pages 245 - 247 see Figures and pages 255-262); starting, by said global computer system, a distribution process in said hub computer system; distributing said file package and an installation process (HP, pages 182 – Software Management) from said global computer system to said hub computer system that is located in said hub tier (HP, Chapter 12) ; automatically distributing said file package and said installation process to said target computer system from said hub computer system utilizing said distribution process (as per the cited sections above); and
>
> automatically installing, by said target computer system, said file package utilizing said installation process (HP, page 181, Target System).

Office Action of April 20, 2007, pp. 3-4.

A prior art reference anticipates the claimed invention under 35 U.S.C. §102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). In this case, each and every feature of the presently claimed invention is not identically shown in the cited reference, arranged as they are in the claims.

Claim 1 is as follows:

> 1. A method in a data processing system for automatically distributing and installing software file packages throughout a multi-tiered computer architecture hierarchy, said hierarchy including a global tier, a hub tier that is below said global tier, and a target tier that is below said hub tier, said method comprising the steps of:
>
> receiving, within a global computer system that is located in said global tier, a distribution request to distribute a file package to a target computer system that is located in said target tier;
>
> starting, by said global computer system, a distribution process in said hub computer system;
>
> distributing said file package and an installation process from said global computer system to said hub computer system that is located in said hub tier;
>
> automatically distributing said file package and said installation process to said target computer system from said hub computer system utilizing said distribution process; and
>
> automatically installing, by said target computer system, said file package utilizing said installation process.

Muller does not anticipate claim 1 because *Muller* does not teach each and every feature as recited in claim 1. For example, *Muller* does not teach distributing and installing software file packages

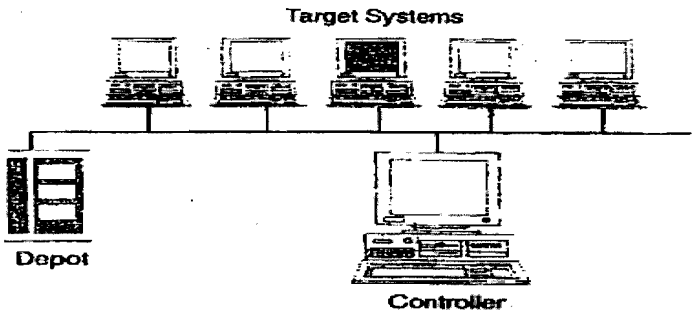
throughout a multi-tiered computer architecture hierarchy, said hierarchy including a global tier, a hub tier that is below said global tier, and a target tier that is below said hub tier. The Examiner asserts otherwise, citing to *Muller*, pages 2-8.

Muller, pages 2-8 discusses the OpenView Framework. The OpenView Framework includes system management tools for facilitating central monitoring and control of multiple systems (*Muller*, p. 2). Additionally, the OpenView Framework includes Network management tools for integrating LAN and WAN multi-vendor environments under central control (*Muller*, p. 3). The OpenView Framework also includes OpenView Components for providing an infrastructure for the management of computing environments (*Muller*, p. 3). The OpenView Framework also includes presentation services, such as user displays (*Muller*, p. 4). Furthermore, the OpenView Framework includes Distributed Communication Infrastructure to make it possible for management applications to access the services of OpenView across a network. Lastly, the OpenView Framework includes event management and data management services. Event management services gather and forward such events as node failures and application changes, while data management services allow information about network elements to be stored in a common location (*Muller*, p. 6).

Muller teaches that the OpenView Framework consists of tools for managing and monitoring the network. However, *Muller* does not teach distributing and installing software file packages throughout a multi-tiered computer architecture hierarchy, said hierarchy including a global tier, a hub tier that is below said global tier, and a target tier that is below said hub tier. Specifically, *Muller* does not teach "a global tier, a hub tier that is below said global tier, and a target tier that is below said hub tier" as recited in claim 1.

Additionally, *Muller* does not teach the features of "starting, by said global computer system, a distribution process *in said hub computer system* and distributing said file package and an installation process *from said global computer system* to said hub computer system that is located in said hub tier," as recited in claim 1. The Examiner asserts otherwise, citing *Muller*, pages 179-182 and chapter 12, pages 245 through 247.

Applicants first address pages 179-182 of *Muller*. *Muller*, pages 179-182 which discusses the OpenView Software Distributor. The Software Distributor assists administrators in managing every aspect of software configuration, verification, and removal, while significantly reducing costs in media duplication, travel and time (p. 180). One or more distribution depots contain software that is available for installation to other systems, called target systems, in the network. *Id.* The controller system manages the software distribution process (Figure 8-7). *Id.*



Source: Hewlett-Packard Co.

Figure 8-7: Software Distribution Environment

Muller, p. 181, Figure 8-7: Software Distribution Environment

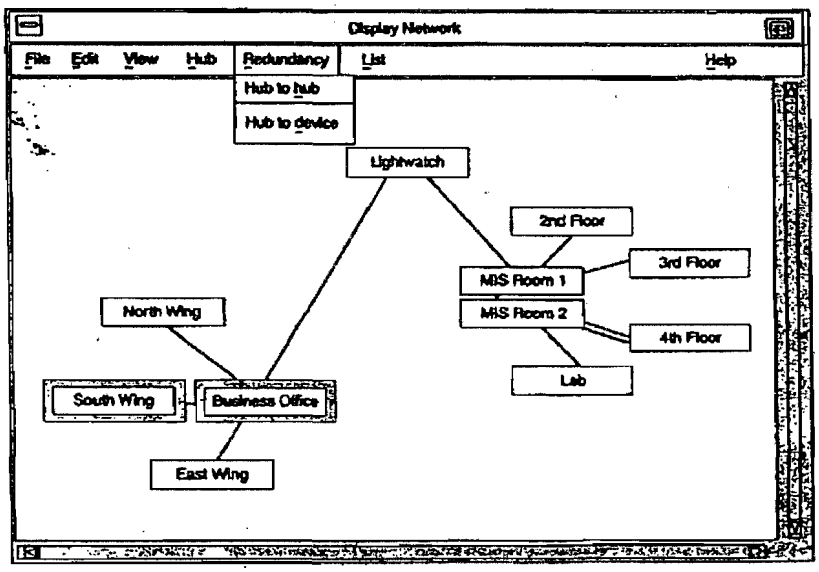
Additionally, the Software Distributor helps the administrators locate available depots and retrieve detailed information on software products in the depot catalog (p. 180). This information includes product name, revision, descriptions, and hardware and software dependencies. *Id.* Furthermore, the Software Distributor supports the unique configuration of each target system (p. 181). The controller system is *any* system using Software Distributor to manage the software distribution process (p. 182).

The above portion of *Muller* teaches a method for distributing software to target systems, some of which may be a part of hubs. However, *Muller* does not teach the feature "distributing said file package and an installation process *from said global computer system* to said hub computer system that is located in said hub tier," as recited in claim 1. *Muller*'s teaching, as depicted in *Muller*'s Figure 8-7, is contrary to the invention of claim 1. Figure 8-7 does not depict a computer architecture hierarchy that includes a global tier, a hub tier that is below said global tier, and a target tier that is below said hub tier. Figure 8-7 shows that the controller system is directly linked to the target systems and the distribution depots. *Muller* does not teach a hub tier that is below said global tier, and a target tier that is below said hub tier.

Nevertheless, the Examiner also asserts that chapter 12 of *Muller* teaches this claimed feature. Still more particularly, the Examiner refers to pages 245-247 and the figures on those pages as teaching the claimed feature of, "distributing said file package and an installation process *from said global computer system* to said hub computer system that is located in said hub tier," as recited in claim 1.

However, chapter 12 of *Muller* does not teach or suggest this feature of claim 1. Chapter 12 of *Muller* is related to enterprise hub management. In particular, *Muller* teaches the use of a program, which he calls "LightWatch," that is a graphics-based system that creates a map of a network topology. *Muller*, p. 242, last full paragraph. LightWatch can monitor, control, and diagnose problems anywhere on the

network. LightWatch can therefore be characterized as a network manager of a distributed network environment which contains hubs. LightWatch is described best with reference to the following figure:



Source: AOC Fiberman

Figure 12-3: Redundancy Window

Muller, figure 12-3, p. 147. This figure shows that LightWatch is connected to two networking hubs, MIS Room 1 and Business Office. Each of these hubs has sub-hubs, such as 2nd Floor, Lab, North Wing, and East Wing. LightWatch can be used to control networking among the various different hubs.

However, figure 12-3 on page 147 of *Muller* does not teach the claimed feature of a *global computing system*, as required by claim 1. Instead, *Muller* teaches that LightWatch is a computer *program* that is used to manipulate multiple hubs. The LightWatch program in Miller is not, itself, part of the hub systems. LightWatch is a just a program that receives input from and delivers input to multiple hubs.

Even assuming LightWatch resides on its own hub, the "LightWatch hub" is not a global hub because such a hub does not encompass both the MIS room 1 hub *and* the business office hub. Instead, the "LightWatch hub" would be a third hub on the same hub tier as the other two hubs. Thus, LightWatch, again, is not a *global computing system*, as in claim 1.

By way of example, LightWatch could be installed on either of the MIS Room 1 hub or the Business Office hub. In both cases, all of the remaining hubs can be managed. However, the fact that LightWatch is installed on any of those hubs does not make those other hubs "global computing systems" because neither of the other hubs encompasses all of the others hubs.

Assuming, *arguendo*, that LightWatch could be construed as a *global computing system*, an assertion that Applicants have shown as incorrect, *Muller* still does not show the claimed feature of, "distributing said file package and an installation process from said global computer system to said hub computer system that is located in said hub tier." Chapter 12 of *Muller* is completely devoid of disclosure relating to the function of distributing software.

The Examiner points to page 182-189 of *Muller* as teaching this claimed feature. The Examiner appears to believe that when *Muller* is read as a whole, *Muller* teaches the combined features of claim 1. However, this interpretation is incorrect.

Pages 182-189 of *Muller* does, indeed, teach software distribution, but only across *a single network*. *Muller* never teaches distributing software *from a global computer system*, as required by claim 1. *Muller* never teaches that software distribution in pages 182-189 can be implemented using LightWatch. Given that *Muller* goes into *excruciating* detail regarding the full capabilities of LightWatch, the Examiner is not entitled to assume that the features of software distribution can be assumed in the capabilities of LightWatch. Instead, LightWatch in chapter 12 of *Muller* only teaches manipulation of the connections and networking among the various computers shown in figure 12-3.

In fact, *Muller* teaches away from a combination of these features. *Muller* indicates in the introduction to chapter 13, page 271, that OpenView lacks the capability of reading and writing to distributed management applications. As described in page 183-184 of *Muller*, the AdminCenter software distribution system is a distributed systems and applications manager. Given that OpenView lacks the capability of reading and writing to such applications, no reason exists to assume, when *Muller* is considered as a whole, that LightWatch can be modified to read and write to such applications to allow a user operating LightWatch to manipulate software distribution on multiple hubs. Additionally, *Muller* provides on page 185 that AdminCenter can be integrated into Network Node Managers and Operations Centers, both of which operate *individual nodes*, not multiple tiers of computing systems, as in claim 1.

Under the law, "the identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.,* 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). In this case, the Examiner has not shown that the *identical invention* is shown by *Muller* – only that *Muller* shows two separate teachings. As shown above, the Examiner cannot assume that these teachings can be combined in the suggested manner. Because *Muller* does not specifically teach *the identical invention*, *Muller* does not anticipate claim 1.

In summary, *Muller* does not teach a global computing system, as in claim 1. Assuming, *arguendo*, *Muller* teaches a global computing system, *Muller* does not teach distributing software from the global computing system, as in claim 1.

Additionally, *Muller* consequently cannot teach the features "starting, by *said global computer system*, a distribution process in said hub computer system and distributing said file package and an installation process from said global computer system to said hub computer system that is located in said hub tier," as recited in claim 1.

As shown above, *Muller* does not teach the identical invention of claim 1. Accordingly, under the standards of *In re Bond* and *Richardson v. Suzuki Motor Co.*, *Muller* does not anticipate claim 1.

Because claims 12 and 23 were rejected for the same reasons as claim 1, the same distinctions between *Muller* and the invention of claim 1 apply to claims 12 and 23. Consequently, the rejection of claims 1, 12, and 23 under 35 U.S.C. §102 have been overcome.

III. 35 U.S.C. § 103, Obviousness

The Examiner rejects claims 2-11, 13-22, and 24-33 under 35 U.S.C. §103 as obvious over *Muller* in view of the *CORBA* as documented by *Alex Gregor*, IBM Component Broker on System/390, IBM Corp., 1998 (hereinafter "*CORBA*"). This rejection is respectfully traversed. Regarding claim 2, the Examiner states:

> The method according to claim 1, further comprising the steps of:
> providing a three-tier *CORBA* network, said *CORBA* network including a hub *CORBA* ORB coupled to a second spoke COMA ORB, and said spoke *CORBA* ORB being coupled to a gateway *CORBA* ORB, wherein said hub *CORBA* ORB occupies said hub tier of said architecture, said spoke *CORBA* ORB occupies a spoke tier of said architecture, said spoke tier between said hub tier and a gateway tier, and said gateway *CORBA* ORB occupies said gateway tier, said gateway tier being located between said gateway tier and said target tier; and coupling said global computer system to said three tier *CORBA* network, said global computer system occupies a top tier of said architecture over said first tier, said global computer system functioning as a *CORBA* ORB and treating said hub *CORBA* ORB as a managed node. (*CORBA*, Chapter2, topology).
> OpenView from 1995 does not explicitly teach using the OMG standard *CORBA*. It is IBM a member of OMG who teaches the use of *CORBA* for distribution (*CORBA*, Chapter 2). Therefore, it would have been-obvious to one of ordinary skill in the art at the time of invention to combine the teaching of HP and *CORBA*, because, using an industry standard makes support more available.

Office Action dated November 2, 2006, p. 6.

Regarding claim 2, the Examiner failed to state a *prima facie* obviousness rejection because the proposed combination does not teach or suggest all of the features of claim 2. A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). In the case at hand, not all of the features of the claimed invention have been properly considered and the teachings of the references themselves do not teach or suggest the claimed subject matter to a person of ordinary skill in the art.

Claim 2 is as follows:

2. The method according to claim 1, further comprising the steps of:

providing a three-tier *CORBA* network, said *CORBA* network including a hub *CORBA* ORB coupled to a second spoke *CORBA* ORB, and said spoke *CORBA* ORB being coupled to a gateway *CORBA* ORB, wherein said hub *CORBA* ORB occupies said hub tier of said architecture, said spoke *CORBA* ORB occupies a spoke tier of said architecture, said spoke tier between said hub tier and a gateway tier, and said gateway *CORBA* ORB occupies said gateway tier, said gateway tier being located between said gateway tier and said target tier; and

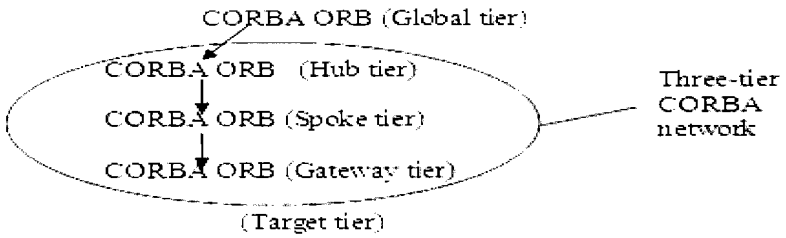
coupling said global computer system to said three-tier *CORBA* network, said global computer system occupies a top tier of said architecture over said first tier, said global computer system functioning as a *CORBA* ORB and treating said hub *CORBA* ORB as a managed node.

Addressing the rejection of claim 2, the Examiner failed to state a *prima facie* obviousness rejection because neither *Muller* nor *CORBA* teach or suggest all features of claim 1, from which claim 2 depends. As discussed above, *Muller* does not teach the claimed feature of distributing said file package and an installation process from said global computer system to said hub computer system that is located in said hub tier. Because *Muller* does not teach said hub tier, *Muller* also does not suggest the features of claim 1.

Furthermore, *CORBA* also does not teach or suggest all of the features of claim 1. The Common Object Request Broker Architecture (*CORBA*) *is a standard* defined by the Object Management Group (OMG) that enables *software components* written in multiple computer languages and running on multiple computers to interoperate (*CORBA*, p. 15). However, *CORBA* does not teach the features of claim 1. Because *CORBA* is a standard (i.e., a set of rules/protocols) for enabling *software components* to interoperate, *CORBA* also does not suggest the features of claim 1.

Because neither *Muller* nor *CORBA* teach or suggest all of the features of claim 1, and because claim 2 depends from claim 1, the proposed combination of *Muller* and *CORBA,* when considered as a whole, does not teach or suggest all of the features of claim 2. Accordingly, the Examiner failed to state a *prima facie* obviousness rejection of claim 2.

Additionally, the proposed combination of *Muller* and *CORBA*, when considered as a whole, also does not teach or suggest all of the features of claim 2. The features of claim 2 are illustrated as follows:



The Examiner mistakenly asserts *CORBA* teaches the features of claim 2. Chapter 2 discusses the Component Broker. The Component Broker is composed of a set of technologies that facilitate distributed object applications (p. 89). The Component Broker provides a server for Business Objects (p. 89). Object services assist the server in taking care of objects, creating objects, finding objects, and managing the life cycle of objects in general (p. 90). The Component Broker is delivered with a set of management tools. These tools assist in installing, monitoring and running the server (p. 92).

Despite all the teachings in regards to the Component Broker, *CORBA* does not teach the features of claim 2. *CORBA* does not teach or suggest a three tier *CORBA* network as recited in claim 2 coupled to said global computer system, wherein said global computer system occupies a top tier of said architecture over said first tier. If the Examiner insists that *CORBA* teaches the features of claim 2, Applicants respectfully request that the Examiner point out with particularity where *CORBA* teaches the features of claim 2.

Because both *Muller* and *CORBA* do not teach or suggest the features of claim 2, the proposed combination, when considered as a whole, also does not teach or suggest all of the features of claim 2. Accordingly, the Examiner has failed to state a *prima facie* obviousness rejection of claim 2.

Furthermore, at least by virtue of their dependency, the Examiner has failed to state a *prima facie* obviousness rejection against claims 3-11, 13-22, and 24-33. Consequently, the rejection of claims 2-11, 13-22, and 24-33 under 35 U.S.C. §103 has been overcome.

IV. Conclusion

The subject application is patentable over the cited references and should now be in condition for allowance. The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

DATE: July 20, 2007

Respectfully submitted,

/Theodore D. Fay III/

Theodore D. Fay III
Reg. No. 48,504
Yee & Associates, P.C.
P.O. Box 802333
Dallas, TX 75380
(972) 385-8777
Attorney for Applicants